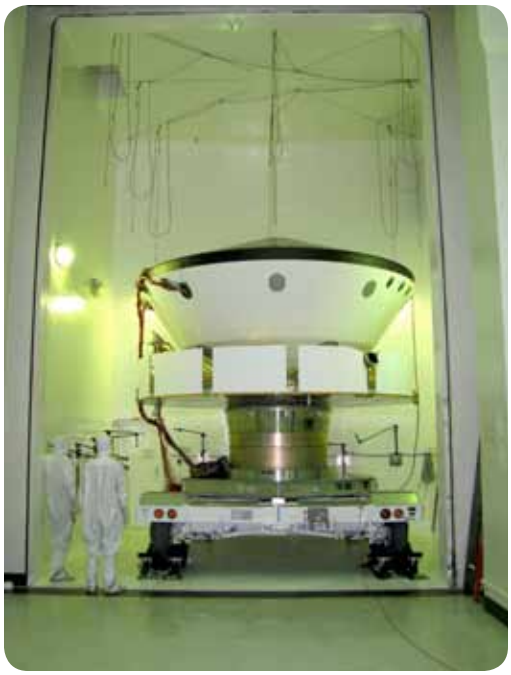
National Aeronautics and Space Administration

NASA's Strategic Capabilities Assets Program

NASA JET PROPULSION LABORATORY
THE ACOUSTIC TEST CHAMBER



The Acoustic Test Chamber at the Jet Propulsion Laboratory (JPL) is used to test various hardware components with a random noise spectrum in order to replicate a launch environment. The facility currently consists of a WAS 3000 Airstream Modulator, which is controlled by M+P VibControl Software, and has data acquisition capabilities of 120 channels.

Requirements can be achieved for a class 10,000 clean room, which includes garment room and air-shower features. An airlock and clean room hi-bay, located directly adjacent to the Acoustic Test Chamber, which allows for easy assembly and inspection procedures.

TECHNICAL SPECIFICATIONS

Max SPL (bare chamber)	153 dB
Typical test SPL	147 dB
Noise floor (gas-on)	115 dB (at 17 PSI)—130 dB (at 40 PSI)
Frequency range	20-1,000 Hz
Medium	Gaseous nitrogen

PHYSICAL CHARACTERISTICS

Chamber dimensions	18 feet x 21 feet x 26 feet
Door dimensions	18 feet x 24 feet
Enclosed volume	10,400 cubic feet
Walls	18-inch-thick double reinforced concrete

CONTACT INFORMATION

Andrew D. Rose
NASA Jet Propulsion Laboratory
(818) 354-0809
E-mail: *Andrew.D.Rose@jpl.nasa.gov*